BLUE RIVER WATERSHED INVENTORY AND ASSESSMENT

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EXECUTIVE SUMMARY

The Blue River is a fifth order stream which flows 41 miles in a northeasterly direction through the Kansas City metropolitan area and enters the Missouri River at river mile 357. Brush, Indian, Tomahawk, Wolf, and Coffee creeks are major fourth order streams in the basin. Average stream gradients range from 4 feet/mile for the Blue River to 68 feet/mile for Round Grove Creek. Average annual precipitation in the basin is 36 inches while average annual runoff is about seven inches. Average annual discharge of the Blue River at stream mile 22 is 157 cfs. Blue River flows tend to be flashy and the stream frequently floods.

An estimated 2.6 miles of the Blue River have been lost due to channelization. A project is currently underway to channelize a 12-mile reach of the stream from Interstate Highway 435 upstream to 59th Street. An estimated 1.6 more miles of stream will be lost. Brush and Indian creeks have also experienced extensive channel alterations.

Blue River water quality is relatively good upstream from the confluence with Indian Creek. A large sewage treatment plant on Indian Creek chronically degrades water quality in the lower half of the Blue River. As the river flows downstream through the industrialized district, water quality deteriorates further. Fish kills associated with depressed dissolved oxygen levels and chemical spills are common. During low flows, the lower three miles of the Blue River is so grossly polluted by another large sewage treatment plant and industries that it sometimes cannot support fish and many other aquatic organisms. The disrupted hydrograph which is typical of urban streams also has adverse effects on aquatic fauna.

Thirty-eight species of fish have been sampled from the Blue River and its tributaries. No angling surveys have been conducted on basin streams, however, fishing pressure is probably moderate. Channel catfish and carp are two of the more important sport fishes, but the Blue River also offers fishing opportunities for largemouth bass and green sunfish, especially in the reach

upstream from the confluence with Indian Creek. Statewide fishing regulations apply to the Blue River and its tributaries in both Missouri and Kansas.

The upper Blue River is a unique resource in the metropolitan area. Fortunately, most of the 18-mile reach from 63rd Street upstream to the Missouri/Kansas state line is in public ownership. Major efforts should be directed toward improving the riparian corridor in this linear parkway. Protecting stream habitat and fauna will require cooperation with numerous local, state, and federal agencies as well as increased public awareness and advocacy.

Blue River watershed streams and corridors are valuable resources for a variety of recreational uses such as fishing, hiking, and nature interpretation. Fortunately, there is a large amount of public park land along the Blue River and, to a lesser degree, along some of its major tributary streams. There is a need to publicize recreational opportunities and improve access to these natural areas. There is also a need to increase public awareness and appreciation for these resources to promote advocacy for watershed streams.

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